

is by no means "common," for I have found it only in four or five localities.

The last time I made acquaintance with this *red species* (be its name what it may, but *vulgaris* suits it as far as description is concerned) was at Bala Lake, in the month of June last; and there it was in great profusion,—indeed, the only species I saw. It was found attached to the under surface of stones near the margin of the lake, and reminded me at the time very forcibly of the red *Dianthi*, to which Mr. Lewes also compares it. It was associated with *Fredericella sultana*, and with another (very rare) Polyzoan, *Plumatella punctata*.

But what is Van der Hoeven's *Hydra grisea*? Is it the same as the brown variety of *vulgaris*? Has it any synonyms? Whose is *H. vulgaris*? Certainly here in Warwickshire it is a misnomer, being the very opposite of common; indeed, I do not remember ever to have seen it in this neighbourhood. I have occasionally found it in Shropshire, and always in very clear, pure water.

H. fusca is more abundant here than even *H. viridis*.

I remain, Gentlemen, Yours, &c.,

W. HOUGHTON.

[Dr. Johnston in the 2nd Edition of his 'British Zoophytes' describes four species: *H. viridis*, *H. vulgaris*, *H. attenuata*, and *H. oligactis*. The *H. grisea* of Van der Hoeven is probably the *H. grisea* of Linnæus, which is given as a synonym of *H. vulgaris*, Pallas.—ED.]

On the Genus Hyalonema. By Dr. J. E. GRAY, F.R.S. &c.

In my original description of the genus *Hyalonema*, published in the 'Proceedings of the Zoological Society' for 1853, p. 63, the publication of which I had delayed in hopes of being enabled, by the acquisition of more copious materials, to clear up some points which did not appear at that time capable of satisfactory elucidation, I described the "*Polypus ignotus*," but placed it near *Gorgonia*, on account of its being covered with bark, like the Barked Corals; and, in a recent paper in the 'Annals,' I suggested its being considered as a peculiar suborder of that class of Zoophytes.

Mr. John J. Brandt has lately published a description and figure of the animal, and shows that, instead of having eight pinnated tentacles, like the *Gorgoniadae*, it has twenty or more simple conical ones, like the *Actiniæ*. Mr. Brandt proposes to form for its reception a peculiar family of the "*Polyactinia*," under the name of *Hyalochætides*. The figure of the animal and the structure of its external coat, and especially of the aperture of the cells, greatly resemble those of the genera *Corticifera* and *Mammillifera* and the other "*Zoanthaires coriaces*" of Blainville, indeed, one is now astonished that we had not before observed the similarity, and placed it with those animals. But the genus (or family) differs from these animals in having an erect axis, formed of a bundle of twisted silicious filaments.

Mr. Brandt received a specimen from Japan, which had been used as an ornament, in which nine specimens of this coral are grouped together in the hole formed by a *Pholas* in a soft rock. He figures this specimen; but I am convinced that this is not the way in which the Coral is naturally produced, and that they must have been artificially inserted into this perforation in the rock by the Japanese.

Mr. Reeves' specimen, which I first described, is the only one which has yet been described as imbedded in what I believe to be its proper habitat—a peculiar kind of Sponge; and I am confirmed in this opinion by the very intimate manner in which the Sponge is attached to the Coral in the above specimen.

Mr. Brandt figures two specimens to which more or less large portions of Sponges are attached, and he considers these Sponges to belong to the species which he calls *Spongia spinicrucis* and *Spongia octancyra*, t. 1. f. 3, 4 & 5.

Mr. Brandt divides his specimens into two genera: 1. *Hyalonema*, of which he describes two species, *H. Sieboldii* and *H. affinis*; 2. *Hyalochæta*, containing a single species, *H. Possieti*; but I must say, from the variation in the several specimens of this Coral which have come under my examination, I am very doubtful if they are more than varieties of the same kind: at any rate, we want much more material before I could admit them to be distinct. The genera appear to differ only in the elongation and non-elongation of the cells, which will doubtless vary according to the manner in which the specimen is preserved.

On the Generative Organs of the Scarabæideous Beetles.

By C. ROUSSEL.

In all the *Scarabæidæ* the testes are formed of spherical, but more or less depressed capsules. A single genus is known to furnish an exception to this,—namely *Onthophagus*, in which they are conical. Their number, which varies sometimes, even in nearly allied groups, is never above twelve or below six in each testis; the latter number is by far the most frequent. They are usually more numerous in the *Cetoninæ*, and in this tribe their mode of insertion likewise presents a peculiar character: the cords which support these capsules usually arise from each other, instead of having a distinct origin.

The form and structure of the penis clearly separates the *Geotrupinæ* and *Coprinæ* from the rest of the family. In the former of these tribes it is short, straight, broad, and thick, and appears at the first glance to be composed only of a single, entirely horny piece. But of the two joints which compose this organ in all the *Scarabæidæ* there is only a vestige of the superior one, whilst the inferior piece has been developed at the expense of the abortive one. In the *Coprinæ* the two joints are nearly of the same size, but the upper one presents a characteristic border near the top. The position which it affects furnishes another means of distinction. In the other tribes it is directed from left to right, whilst in this it is always from right to left.

Beyond these two groups the penis presents a very remarkable